

REMARKS

Claims 1-11 stand rejected under 35 USC 112, second paragraph, as being indefinite for not defining the product with sufficient particularity. Specifically, the Examiner contends that the claim recites “only the desired physical properties of the phosphorous compound polyester, rather than setting forth structural and/or chemical limitations of said fabrics.”

Amended claim 1 includes additional structural and chemical limitations that lead to the claimed physical properties. Accordingly, this rejection should be withdrawn. Specifically, claim 1 has been amended to specify that the phosphorous compound copolymerized polyester includes “a phosphorous atom in a side chain.” This amendment is supported by the specification on page 11, lines 11-13. Claim 1 has also been amended to specify that the flame retardant polyester-film is produced by melt-spinning at a take-up speed of 1000 m/min - 4500 m/min. This amendment is supported by the specification page 16, lines 9-13.

The phosphorous atom in the side chain of the copolymerized polyester improves the fiber's resistance to hydrolysis and improves the dyeing properties of the fiber as compared to fiber's made from polyesters containing phosphorous in the main chain. In addition, by employing a take-up speed of more than 1000 m/min, the shear rate of the discharged polyester can be set to an appropriate range that improves the tenacity and abrasion resistance of the fibers.

Accordingly, the claimed copolymerized polyester having a phosphorous atom in the side chain and the use of the claimed take-up speed for spinning the polyester fibers made from the copolymerized polyester can produce a polyester fiber with the claimed properties, including shrinkage in hot water, fiber fineness and heat stability.

Claims 1-4, 6 and 8 stand rejected under 35 USC 102(b) as being anticipated by or in the alternative under 35 USC 103(a) as obvious over Endo. This rejection is respectfully traversed. The Examiner contends that the claimed properties are inherent to the polyester fibers disclosed in Endo. The Examiner further contends if the claimed properties are not inherent, additional limitations are required to further differentiate the claimed fibers.

As stated above, claim 1 has been amended to specify that the polyester fiber includes a

phosphorous compound copolymerized polyester that includes a phosphorous atom in a side chain. The polyester described in Endo is a main chain type copolymerized polyester containing a phosphorus compound in the main chain, not in the side chain as claimed. As explained above, the presence of the phosphorous atom in the side of the polyester as claimed, instead of the main chain, as in Endo, allows the claimed polyester to obtain the properties specified in formulas 1-3. Accordingly, the polyester described in Endo does not inherently have the claimed properties. Further, since Endo does not mention or even suggest a phosphorous compound copolymerized polyester that includes a phosphorous atom in a side chain, the claimed polyester is not anticipated nor obvious in view of Endo.

Claims 1 and 7 stand rejected under 103(a) as being unpatentable over Buxbaum. This rejection is respectfully traversed. Buxbaum describes a method for adding a phosphorus compound into a reaction mixture as a catalyst during polymerization of a polyester. Buxbaum does not describe a polyester which contains phosphorous within the polyester molecule as claimed. Since Buxbaum does not describe or suggest a polyester fiber that includes a phosphorus compound copolymerized polyester that includes a phosphorous atom in a side chain as claimed, this rejection should be withdrawn.

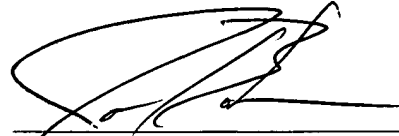
For the foregoing reason a notice of allowance is solicited.

In the event that the transmittal letter is separated from this document and the Patent and Trademark Office determines that an extension and/or other relief is required, applicants petition for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no. 358362010400.

Respectfully submitted,

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By:



Jonathan Bockman
Registration No. 45,640
Morrison & Foerster LLP
1650 Tysons Boulevard
Suite 300
McLean, Virginia 22102
Telephone: (703) 760-7769
Facsimile: (703) 760-7777